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AMENDMENT UNDER 37 C.F.R. § 1.116  
U.S. Patent Application No.: 10/530,173

Attorney Docket No.: Q87280

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (previously presented): An apparatus for estimating a magnetic pole position of a motor for a controlling apparatus for driving a motor by a voltage source PWM inverter, and controlling a torque, torque and speed, or torque, speed, and position of the motor, wherein said apparatus comprises: means for switching over first means for producing an arbitrary phase difference in PWM carrier signals between respective two phases of three phases, and second means for causing the phase difference between the two phases to become zero; means for extracting high-frequency currents in a same frequency band as carrier signals generated by it, from detected currents; and means for estimating a magnetic pole position by using the extracted high-frequency currents.

2. (previously presented): An apparatus for estimating a magnetic pole position of a motor according to claim 1, wherein said means for estimating a magnetic pole position by using the extracted high-frequency currents comprises: